

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended) A signal switching device comprising:

a selecting unit operable to select a video signal from any one of a plurality of video signal inputs, each video signal input being transmitted from an input source device of a plurality of input source devices;

a memory for storing information;

a reading channel for reading the information from-out of an output destination device-
~~which that~~ is an output destination of ~~a-the~~ video signal;

a reading unit operable to read the information through said reading channel, the information indicating a physical address of said signal switching device and indicating a status of the output destination device ~~through said reading channel;~~

a storing unit operable to store the information read by said reading unit into said memory;

a read-out unit operable to read out the information stored in said memory;

a plurality of read-out channels for outputting the information to ~~the-a~~ plurality of input source devices, each read-out channel of said plurality of read-out channels corresponding to a respective input source device of the plurality of input source devices which is an input source of a plurality of video signal inputs; and

an outputting unit operable to output the information indicating the status of the output destination device (i) through-said a read-out channel, of said plurality of read-out channels, that corresponds to the input source device transmitting the video signal selected by said selecting unit and (ii) to the input source device transmitting the video signal selected by said selecting

unit.

Claim 2 (Currently Amended) The signal switching device according to Claim 1, wherein said outputting unit is operable to output the information indicating the status of the output destination device only through ~~from~~ said read-out channel that corresponds ~~corresponding~~ to the video signal ~~input~~ selected by said selecting unit.

Claim 3 (Currently Amended) The signal switching device according to Claim 2 further comprising an address setup unit operable to set up a respective physical address of each ~~of the~~ input source device based on the physical address of said signal switching device,

wherein said outputting unit is operable to output each respective ~~the~~ physical address of each input source device to each, ~~which is set up by said address setup unit, for the respective~~ input source device ~~devices~~, and

wherein said selecting unit is operable to select a video signal ~~input~~ that corresponds ~~corresponding~~ to the physical address of an input source device ~~from any one~~ of the plurality of input source devices.

Claim 4 (Currently Amended) The signal switching device according to Claim 1 further comprising:

a plurality of control signal transmission lines for transmitting a device control signal between the output destination device and the respective input source devices;

a voltage detecting unit operable to detect a voltage status of each ~~said respective~~

control signal transmission of said plurality of control signal transmission lines; and

a power status control unit operable to change a status of a power supply of said signal switching device depending on the detected voltage status ~~result~~ obtained by said voltage detecting unit.

Claim 5 (Currently Amended) The signal switching device according to Claim 4, wherein said power status control unit is operable to turn on the power supply of said signal switching device when, ~~in the case where~~ a pull-up of a ~~said~~ control signal transmission line of said plurality of control signal transmission lines is detected by said voltage detecting unit.

Claim 6 (Currently Amended) The signal switching device according to Claim 4, wherein said power status control unit is operable to turn off the power supply of said signal switching device when ~~in the case where~~ the detected voltage status of ~~said~~ a control signal transmission line of said plurality of control signal transmission lines is decreased to a ground voltage ~~by said voltage detecting unit~~.

Claim 7 (Currently Amended) The signal switching device according to Claim 1 further comprising:

a plurality of control signal transmission lines for transmitting a device control signal between the output destination device and the respective input source devices; and

a power supply control unit operable to control a power supply to all of or part of the output destination device and the respective input source devices depending on whether or not

~~each-said~~ respective control signal transmission line of said plurality of control signal transmission lines ~~are~~ is used.

Claim 8 (Currently Amended) The signal switching device according to Claim 7, wherein said power supply control unit is operable to supply power when in the case where a message, ~~which~~ being the device control signal, is transmitted to a respective-said control signal transmission line.

Claim 9 (Currently Amended) The signal switching device according to Claim 7, wherein said power supply control unit is operable to stop a power supply when a respective ~~in the case where said~~ control signal transmission line is not used.

Claims 10-21 (Cancelled)

Claim 22 (Currently Amended) A signal switching method comprising:
a selecting step ~~for~~ of selecting a video signal from any one of a plurality of video signal inputs, each video signal input being transmitted from an input source device of a plurality of input source devices;
a reading step ~~for~~ of reading information through a reading channel, the information indicating an own a physical address of a signal switching device and indicating a status of an output destination device that is an output destination of the video signal through a, and the reading channel being for reading the information from-out of the output destination device-

~~which is an output destination of a video signal;~~

~~a storing step for~~ of storing the information read in said reading step into a memory;

~~a read-out step for~~ of reading out the information stored in the memory; and

~~an outputting step for~~ of outputting the information indicating the status of the output destination device (i) through a read-out channel of a plurality of read-out channels for outputting the information to ~~a part of or all of a~~ the plurality of input source devices, each read-out channel of the plurality of read-out channels corresponding to a respective input source device of the plurality of input source devices ~~which are input sources of a plurality of video signal inputs,~~ the read-out channel through which the information is output corresponding to the input source device transmitting the video signal selected by said selecting step, and (ii) to the input source device transmitting the video signal selected by said selecting step.

Claim 23 (Cancelled)

Claim 24 (Currently Amended) A computer-readable recording medium having a program recorded thereon, the program for causing a computer to execute a method comprising:

~~a selecting step for~~ of selecting a video signal from any one of a plurality of video signal inputs, each video signal input being transmitted from an input source device of a plurality of input source devices;

~~a reading step for~~ of reading information through a reading channel, the information indicating a physical address of a main device and indicating a status of an output destination device that is an output destination of the video signal through a, and the reading channel being

for reading the information ~~from~~ out of the output destination device ~~which is an output destination of a video signal~~;

a storing step ~~for~~ of storing the information read in said reading step into a memory;

a read-out step ~~for~~ of reading out the information stored in the memory; and

an outputting step ~~for~~ of outputting the information indicating the status of output destination device (i) through a read-out channel of a plurality of read-out channels for outputting the information to ~~a part of or all of a~~ the plurality of input source devices, each read-out channel of the plurality of read-out channels corresponding to a respective input source device of the plurality of input source devices which are input sources of a plurality of video signal inputs, the read-out channel through which the information is output corresponding to the input source device transmitting the video signal selected by said selecting step, and (ii) to the input source device transmitting the video signal selected by said selecting step.

Claim 25 (Cancelled)

Claim 26 (New) A signal switching device comprising:

a plurality of control signal transmission lines for transmitting a device control signal between an output destination device that is an output destination of a video signal and a plurality of input source devices;

a selecting unit operable to select a video signal from a plurality of video signal inputs, each video signal input being transmitted from an input source device of the plurality of input source devices;

a memory for storing information;

a reading channel for reading the information from the output destination device that is the output destination of the video signal;

a reading unit operable to read the information through said reading channel, the information indicating a physical address of said signal switching device and indicating a status of the output destination device;

a storing unit operable to store the information read by said reading unit into said memory;

a read-out unit operable to read out the information stored in said memory;

a plurality of read-out channels for outputting the information to the plurality of input source devices, each read-out channel of said plurality of read-out channels corresponding to a respective input source device of the plurality of input source devices; and

an outputting unit operable to output the information indicating the status of the output destination device through a read-out channel of the plurality of read-out channels to a respective input source device,

wherein said selecting unit is operable to select the video signal of the plurality of video input signals according to the device control signal transmitted, via said plurality of control signal transmission lines, from the input source device that received the information indicating the status of the output destination device.

Claim 27 (New) The signal switching device according to claim 26, wherein said outputting unit is operable to output the information indicating the status of the output

destination device through a read-out channel, of said plurality of read-out channels, that corresponds to the input source device transmitting the video signal selected by said selecting unit.

Claim 28 (New) The signal switching device according to Claim 26, wherein said outputting unit is operable to output the information indicating the status of the output destination device only through said read-out channel that corresponds to the video signal selected by said selecting unit.

Claim 29 (New) The signal switching device according to Claim 28 further comprising an address setup unit operable to set up a respective physical address of each input source device based on the physical address of said signal switching device,

wherein said outputting unit is operable to output each respective physical address of each input source device to each respective input source device, and

wherein said selecting unit is operable to select a video signal that corresponds to the physical address of an input source device of the plurality of input source devices.

Claim 30 (New) The signal switching device according to Claim 26 further comprising:

a voltage detecting unit operable to detect a voltage status of each control signal transmission line of said plurality of control signal transmission lines; and

a power status control unit operable to change a status of a power supply of said signal switching device depending on the detected voltage status obtained by said voltage detecting

unit.

Claim 31 (New) The signal switching device according to Claim 30, wherein said power status control unit is operable to turn on the power supply of said signal switching device when a pull-up of a control signal transmission line of said plurality of control signal transmission lines is detected by said voltage detecting unit.

Claim 32 (New) The signal switching device according to Claim 30, wherein said power status control unit is operable to turn off the power supply of said signal switching device when the detected voltage status of a control signal transmission line of said plurality of control signal transmission lines is decreased to a ground voltage.

Claim 33 (New) The signal switching device according to Claim 26 further comprising a power supply control unit operable to control a power supply to all of or part of the output destination device and the respective input source devices depending on whether or not each respective control signal transmission line of said plurality of control signal transmission lines is used.

Claim 34 (New) The signal switching device according to Claim 33, wherein said power supply control unit is operable to supply power when a message, being the device control signal, is transmitted to a respective control signal transmission line.

Claim 35 (New) The signal switching device according to Claim 33, wherein said power supply control unit is operable to stop a power supply when a respective control signal transmission line is not used.